

MAR 17 2010

Application No. 10/565715
Responsive to the office action dated November 24, 2009

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

Claim 32 has been added as supported by claim 23, Fig. 1, and the specification at page 8, lines 4-17, page 14, line 25 – page 15, line 13, page 20, line 4 – page 21, line 23, and page 58, line 9 – page 59, line 7. Further, claims 23-26 and 29-31 have been amended editorially.

Claims 23-31 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi et al. (U.S. Patent No. 6,989,289) in view of Schmidt (U.S. Patent Application Publication No. 2004/0054041). Applicants respectfully traverse this rejection.

This rejection relies on the disclosure of the ionic liquid by Schmidt. Claim 23 is directed to a capacitor, which has high electrical conductivity and can repair a defect in an anodized film formed on a valve metal positive electrode (see page 7, line 25 – page 8, line 17 of the specification). JP 10-265674 (Mori et al.), which is referred to in Schmidt (see para. [0013] on page 1), is directed to a solid polymer electrolyte and discloses a polymer complex including synthetic polymer (see paras. [0007]-[0008]). The synthetic polymers listed in Mori are non-electrically conductive polymers (*id.*). Thus, Mori fails to disclose the combination of the conductive polymer and ionic liquid as claim 23 recites. Further, Mori merely lists an electrolyte condenser, i.e., a capacitor, as a potential application of the solid polymer electrolyte and discloses neither examples of a capacitor including the electrolyte nor the property of withstand voltage of the capacitor (see para. [0026]). By providing the ionic liquid in the composite material, which is included in the negative electrode, the ionic liquid included in the composite material can repair a damaged anodized film of a valve metal, and the withstand voltage of the capacitor is significantly improved (see Figs. 1 and 2 and page 20, line 4 – page 21, line 23 and page 58, line 9 – page 59, line 7 including table 1 of the specification). In addition, the ionic liquid in the composite material provides the property of repairing the

Application No. 10/565715

Responsive to the office action dated November 24, 2009

damaged anodized film in a liquid form (see page 15, lines 7-13 of the specification). In contrast, Mori is directed to a solid polymer electrolyte in which an ionic liquid is solidified with a polymer to overcome deficiencies of a liquid electrolyte (see paras. [0003] and [0006]). Thus, Mori does not recognize the advantages of the composite material including the ionic liquid such as repairing a damage in the anodized film of the valve metal and increasing the withstand voltage of the capacitor as the capacitor of claim 23 provides, and such advantages of the composite material are not expected from Mori.

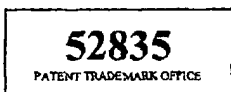
Schmidt is directed to providing a conductive or antistatic binder or adhesive systems including (meth)acrylate polymers, which generally are known as non-conductive polymers (see abstract and para. [0047]), and Schmidt fails to disclose a composite material of a conductive polymer and ionic liquid as claim 23 recites. Further, like Mori, Schmidt does not disclose the capacitor including the composite material containing the conductive polymer and ionic liquid and neither teaches nor suggests the advantages of the composite material in the capacitor such as repairing a damaged anodized film and improving the withstand voltage of the capacitor as the capacitor of claim 23 provides. Thus, these advantages of the capacitor including the composite material are not expected from Schmidt.

Accordingly, there is no reasonable basis to combine Shiraishi with Schmidt and/or Mori, which discloses neither the composite material, which is combination of the conductive polymer and ionic liquid as claim 23 recites, nor the advantages of the composite material included in the capacitor as discussed above. Thus, claim 23 and claims 24-31, which ultimately depend from claim 23, are distinguished from Shiraishi in view of Schmidt, and this rejection should be withdrawn.

Added method claim 32 recites the similar capacitor to that of claim 23 and further clarifies that the ionic liquid included in the composite material repairs in a liquid form the defect of an anodized film. Accordingly, claim 32 also is distinguished from Shiraishi in view of Schmidt.

Application No. 10/565715
Responsive to the office action dated November 24, 2009

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



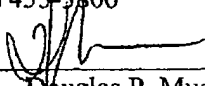
Dated: March 17, 2010

DPM/my/jls

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By:


Douglas P. Mueller
Reg. No. 30,300